

1    **Claims 1 – 17 (cancelled)**

1    **Claim 18. (new)** A classification and management system for patients with  
2    lower extremity arterial occlusive disease comprising a network of remotely  
3    located computers integrated to implement the steps of:

- 4        • examining a patient at a healthcare facility with lower extremity arterial  
5        occlusion disease,
- 6        • collecting patient data including physically observable conditions of the  
7        patient's lower extremities and noninvasive arterial pressure and blood  
8        flow data,
- 9        • entering and storing the collected patient data in the memory of a  
10      computer at the healthcare facility,
- 11      • transmitting said collected patient data from the healthcare facility  
12      computer to a computer at an evaluating authority,
- 13      • receiving and storing the collected patient data in the computer at the  
14      evaluating authority,
- 15      • reviewing and comparing said collected patient data against a medically  
16      accepted set of disease specific criteria at the evaluating authority to  
17      classify patients as "potentially at risk" and "not at risk" of developing  
18      complications of arterial occlusive disease,
- 19      • entering and storing patient classification data in the memory of the  
20      computer at the evaluation authority,
- 21      • transmitting said patient classification data from the evaluating authority  
22      computer to the computer at the healthcare facility,
- 23      • receiving and storing the patient classification data in the computer at  
24      the healthcare facility,
- 25      • referring patients classified as "potentially at risk" of arterial occlusive  
26      disease to an accredited laboratory for noninvasive vascular evaluation,
- 27      • transmitting the "potentially at risk" patient data from the healthcare  
28      facility to the accredited laboratory,
- 29      • entering and storing the "potentially at risk" patient data in a computer  
30      at the accredited laboratory,
- 31      • evaluating those "potentially at risk" patients at the accredited  
32      laboratory against medically accepted criteria,

- 33       • entering and storing the data results of said noninvasive vascular  
34        evaluation in the memory of the computer at the accredited laboratory,
- 35       • transmitting said stored data results from the accredited laboratory  
36        computer to the computer at the evaluating authority for final  
37        classification,
- 38       • receiving and storing the stored data results in the computer at the  
39        evaluating authority,
- 40       • receiving the data and classifying each patient at the evaluating  
41        authority against medically accepted criteria as "at risk" or "not at risk"  
42        of developing arterial occlusive disease,
- 43       • entering and storing patient classification in the memory of the  
44        computer at the evaluation authority,
- 45       • transmitting said "at risk" or "not at risk" patient final classification from  
46        the evaluation computer to the computer at the healthcare facility,
- 47       • entering and storing said "at risk" or "not at risk" patient final  
48        classification at the healthcare facility computer,
- 49       • referring patients from the healthcare facility computer database having  
50        a final classification of "at risk" for critical ischemia with associated  
51        extremity lesions and patients with noninvasive evidence of severe  
52        ischemia to a vascular surgery facility for vascular surgical assessment  
53        to determine whether revascularization is necessary,
- 54       • reviewing the data and assessing such "at risk" patients against  
55        medically accepted criteria as "clinical indication for operation" or "no  
56        indication for operation" at the vascular surgery facility,
- 57       • electing revascularization and periodic management system evaluation  
58        at the healthcare facility or routine wound care and periodic revaluation  
59        at the healthcare facility by patients assessed as "clinical indication for  
60        operation",
- 61       • monitoring patients assessed as "no indication for operation" by the  
62        healthcare facility with increased precautions to monitor for detection of  
63        any visible deterioration of the patient's lower extremities that would  
64        require reassessment,
- 65       • referring patients having ulcers, pain or gangrene at the time of "no  
66        indication for operation" assessment for reassessment,

- 67       • referring patients classified as "no indication for operation" that develop  
68        ulcers, pair and/or gangrene to the vascular surgery facility for  
69        reassessment,
- 70       • reassessing the referred patient at the vascular surgery facility against  
71        medically accepted criteria as "no indication for operation" or "clinical  
72        indication for operation",
- 73       • entering and storing the reassessment in a memory of a computer at  
74        the vascular surgery facility,
- 75       • transmitting the reassessment of "no indication for operation" or "clinical  
76        indication for operation" from the vascular surgery facility computer to  
77        the computer at the evaluating authority for reevaluation as "no  
78        indication for operation" or "clinical indication for operation",
- 79       • transmitting the reevaluation from the evaluating authority computer to  
80        the computer at the healthcare facility with the appropriate medical  
81        procedure and regimen,
- 82       • treating and monitoring patients classified as "not at risk", "at risk" and  
83        assessed as "no indication for operation" or "clinical indication for  
84        operation" at the healthcare facility,
- 85       • receiving and storing patient treatment and progress data in the  
86        memory of the computer at the healthcare facility,
- 87       • providing "not at risk" patients without limb ulcers routine care and  
88        precautions at the healthcare facility,
- 89       • providing "not at risk" patients with limb ulcers routine wound care at the  
90        healthcare facility,
- 91       • providing "not at risk" patients with limb ulcers periodic reevaluation by  
92        the evaluating authority,
- 93       • entering and storing the periodic patient reevaluations in the memory of  
94        the computer at the evaluating authority,
- 95       • providing "at risk" patients assessed as "no indication for operation" or  
96        "operation not elected by patient", and "clinical indication for operation"  
97        patient undergoing revascularization at the vascular surgery facility with  
98        intensive wound care at the healthcare facility,
- 99       • entering and storing patient treatment and evaluation of patients in the  
100      memory of the computer at the vascular surgery facility,

- 101       • transmitting the patient treatment and evaluation data of patients from
- 102        the vascular surgery facility to the healthcare facility,
- 103       • receiving and storing the patient treatment and evaluation data of
- 104        patients in the computer at the healthcare facility,
- 105       • reviewing and providing periodic reevaluations of "at risk" patients data
- 106        assessed as "no indication for operation" or "operation not elected by
- 107        patient" with increased precautions at the healthcare facility.